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SEMICONDUCTOR DEVICE

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[There are no amendments to this patent.]

### Abstract

#### Objective

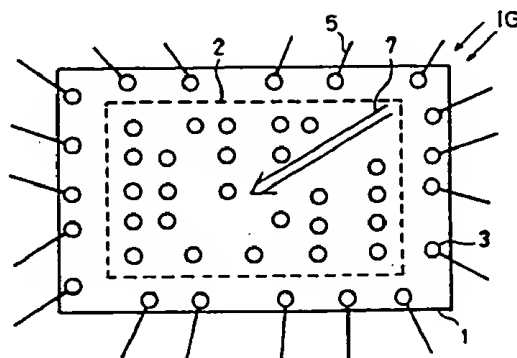
To prevent the formation of parts not filled with resin during the resin molding of a multichip module in a semiconductor device through the adaptation of a simple means.

#### Constitution

It is equipped with a multichip module, in which each surface of the electronic circuit in the respective primary semiconductor element (1), in which the surface of the electronic circuit is formed without providing solder bumps (3) along the

line almost in the center viewed from the resin gate IG, and secondary semiconductor element (2), in which the surface of the electronic circuit is similarly formed without providing solder bumps (3) along the line anticipating almost the center from the flow-in side of the resin IG, are opposed to each other, and they are also electrically and mechanically connected through the solder bumps (3), and a package, which is molded with resin so that the said multichip module is hermetically contained inside.

A top-view diagram of a major part showing the multichip module for the explanation of the application example



- Key:
- 1 Primary semiconductor element
  - 2 Secondary semiconductor element
  - 3 Solder bump
  - 5 Bonding wire
  - 7 Passage of resin

Claims

1. A semiconductor device characterized by being equipped with a multichip module, in which each surface of the electronic circuit in the respective primary semiconductor element, in which the surface of the electronic circuit is formed without providing solder bumps along the line anticipating almost the center from the flow-in side of the resin, and a secondary semiconductor element, in which the surface of the electronic circuit is similarly formed without providing solder bumps along the line anticipating almost the center from the flow-in side of the resin, are opposed to each other, and they are also electrically and mechanically connected through the solder bumps, and a package which is molded with resin so that said multichip module is hermetically contained inside.

2. The semiconductor device described in Claim 1, characterized by forming a slope between the primary semiconductor element and the secondary semiconductor element, which oppose each other, and the solder bumps being formed to be larger at the side where the resin flows in and formed smaller as they separate from the side where the resin flows in.

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